

**UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

EPA Region 5 Records Ctr.



332682

**IN THE MATTER OF:**

Nease Chemical Site  
Salem, Columbiana County, Ohio

**ADMINISTRATIVE SETTLEMENT  
AGREEMENT AND ORDER ON  
CONSENT FOR REMEDIAL DESIGN**

Respondent: Rutgers Organics Corporation

U.S. EPA Region 5  
CERCLA Docket No.

**V-W-09-C-928**

Proceeding under Sections 104, 106, 107, and  
122 of the Comprehensive Environmental  
Response, Compensation, and Liability Act of  
1980, as amended, 42 U.S.C. §§ 9604, 9606,  
9607, and 9622.

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## **I. JURISDICTION AND GENERAL PROVISIONS**

1. The Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Rutgers Organics Corporation ("Respondent" or "ROC"). This Settlement Agreement provides that the Respondent shall undertake a Remedial Design ("RD"), including various procedures and technical analyses, to produce a detailed set of plans and specifications for implementation of the Remedial Action ("RA") selected in EPA's September 24, 2008, Record of Decision ("ROD") for Operable Unit 3 ("OU 3") of the Nease Chemical Site ("Site"). The Site is located about two and one-half miles northwest of the town of Salem, near the intersection of State Route 14 and Allen Road in Columbiana County, Ohio. In addition, Respondent shall reimburse the United States and the State for certain response costs that it incurs, as provided herein.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), as amended, 42 U.S.C. §§ 9604, 9606, 9607, and 9622. This authority was delegated to the EPA Administrator by Executive Settlement Agreement 12580 (52 *Fed. Reg.* 2923, Jan. 29, 1987) and further delegated to EPA Regional Administrators as of January 16, 2002, by EPA Delegation No. 14-14-C, and to the Director, Superfund Division, EPA Region 5, by Regional Delegation Nos. 14-1 and 14-2.

3. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law, and determinations in Sections IV and V of this Settlement Agreement. Respondent agrees to comply with, and be bound by, the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

4. The objectives of EPA and Respondent in entering into this Settlement Agreement are to protect public health or welfare or the environment at the Site by the design of RA for OU 3 at the Site by Respondent, to reimburse certain response costs of EPA as provided herein, and to resolve the claims of EPA against Respondent as provided in this Settlement Agreement.

5. In accordance with the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300, *et seq.*, as amended ("NCP"), and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the Ohio Environmental Protection Agency ("Ohio EPA") on February 19, 2009, of negotiations with potentially responsible parties regarding the implementation of the RD for OU 3 of the Site, and EPA has provided Ohio EPA with an opportunity to participate in such negotiations and be a party to this Settlement Agreement.

6. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), EPA notified the Ohio EPA and the Department of Interior, Office of the Solicitor on February 19, 2009 of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under federal trusteeship and encouraged the trustee(s) to participate in the negotiation of this Settlement Agreement.

## **II. PARTIES BOUND**

7. This Settlement Agreement applies to and is binding upon EPA and the Respondent and its successors and assigns. Any change in ownership or corporate status of the Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement. The signatories to this Settlement Agreement certify that they are authorized to execute and legally bind the parties they represent.

8. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement within 21 days after the Effective Date of this Settlement Agreement or after the date of such retention. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

## **III. DEFINITIONS**

9. Unless otherwise expressly provided herein, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or its implementing regulations. Whenever terms listed below are used in this Settlement Agreement, in the documents attached to this Settlement Agreement, or incorporated by reference into this Settlement Agreement, the following definitions shall apply:

a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, *et seq.*

b. "CSM" shall mean conceptual site model.

c. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, this period shall run until the close of business of the next working day.

d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XVIII (Effective Date and Subsequent Modification).

e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

f. "Feeder Creek" shall mean the small tributary to the Middle Fork of Little Beaver Creek that drains the former Nease facility.

g. "Future Response Costs" shall mean all direct, indirect or other costs, not inconsistent with the NCP, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to

Paragraph 51 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), and Paragraph 87 (Work Takeover). Future Response Costs shall also include all Interim Response Costs.

h. "Institutional controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well-drilling prohibitions.

i. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with CERCLA § 107(a), 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.<sup>1</sup>

j. "Interim Response Costs" shall mean all direct, indirect and other costs, not inconsistent with the NCP : a) paid by the United States in connection with the OU 3 between September 24, 2008 (the date of ROD signature) and the Effective Date; or b) incurred in the same time period, but paid after that date.

k. "MFLBC" shall mean Middle Fork of Little Beaver Creek.

l. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, *et seq.*, including any amendments thereto.

m. "Ohio EPA" shall mean the Ohio Environmental Protection Agency and any successor departments or agencies of the State.

n. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto. In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

o. "OU 2" shall mean Operable Unit 2 at the Nease Chemical Site as specified by the OU 2 ROD.

p. "OU 2 ROD" shall mean the EPA Record of Decision relating to OU 2 at the Nease Chemical Site, and all attachments thereto that the Director, Superfund Division, EPA Region 5, or his/her delegate, signed on September 29, 2005.

q. "OU 3" shall mean Operable Unit 3 at the Nease Chemical Site as specified by the OU 3 ROD.

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<sup>1</sup> The Superfund currently is invested in 52-week MK notes. The interest rate for these MK notes changes on October 1 of each year. Current and historical rates are available online at [http://www.epa.gov/budget/finstatement/superfund/int\\_rate.htm](http://www.epa.gov/budget/finstatement/superfund/int_rate.htm).

r. "OU 3 PDI Work Plan" shall mean the document developed pursuant to Paragraph 31.a of this Settlement Agreement and approved or modified by EPA, and any amendments thereto.

s. "OU 3 RD Work Plan" shall mean the document developed pursuant to Paragraph 31.d of this Settlement Agreement and approved or modified by EPA, and any amendments thereto.

t. "OU 3 Record of Decision" or "OU 3 ROD" shall mean the EPA Record of Decision relating to OU 3 at the Nease Chemical Site, and all attachments thereto that the Director, Superfund Division, EPA Region 5, or his/her delegate, signed on September 24, 2008.

u. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

v. "Parties" shall mean EPA and Respondent.

w. "Performance Standards" shall mean the cleanup standards and other measures of achievement of the goals of the Remedial Action, set forth in Section 8 of the OU 3 ROD and the SOW.

x. "Pre-design Investigation" or "PDI" shall mean a series of investigations and pilot studies that Respondent shall undertake to support the RD and RA, set forth pursuant to the PDI Work Plan, Paragraph 31 of this Settlement Agreement, Section 9.2 of the OU 3 ROD and Section III.B of the SOW.

y. "Remedial Action" or "RA" shall mean those activities that Respondent shall undertake to implement the remedy for OU 3 as set forth in the OU 3 ROD.

z. "Remedial Design" or "RD" shall mean those activities that Respondent shall undertake to develop the final plans and specifications for the RA pursuant to the OU 3 RD Work Plan, Paragraph 31 of this Settlement Agreement, and the SOW.

aa. "RM" shall mean river mile.

bb. "ROC" shall mean Rutgers Organics Corporation, a corporation organized and existing under the laws of the State of Pennsylvania.

cc. "RPM" shall mean Remedial Project Manager.

dd. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral and includes one or more paragraphs.

ee. "Site" shall mean the Nease Chemical Superfund Site, which is shown generally on Figure 1 in Appendix B. The Site includes the former Nease facility, portions of the former Crane-Deming facility, and the areas where groundwater is contaminated (comprising

OU 2); Feeder Creek and portions of the MFLBC (comprising OU 3); and nearby areas necessary for the implementation of the response actions. Figure 1 does not show the full extent of the MFLBC.

ff. “Statement of Work” or “SOW” shall mean the statement of work for implementation of the PDI and RD, and any modifications made thereto in accordance with this Settlement Agreement, as set forth in Appendix A of this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement.

gg. “Waste Material” shall mean: 1) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and 3) any “solid waste” under Section 1004(27) of the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act or “RCRA”), 42 U.S.C. § 6903(27).

hh. “Work” shall mean all activities Respondent is required to perform for the design of the remedial action for OU 3 under this Settlement Agreement except those required by Section XIII (Record Retention).

#### **IV. FINDINGS OF FACT**

10. The Nease Chemical Superfund Site is located about two and a half miles northwest of Salem, Ohio. The Site includes the former Nease Chemical facility, which covers about 44 acres and contains five former wastewater treatment ponds and areas of contaminated soil. The facility is bounded by small light-industrial operations along Allen Road to the east and northeast, residential homes along State Route 14, and wooded areas and pasture lands to the north. Conrail railroad tracks traverse the facility. The Salem Wastewater Treatment Plant is situated approximately 2,400 feet east of the facility. Runoff migrates to the main surface water body in the area, the Middle Fork of Little Beaver Creek (“MFLBC”), located about 1,800 feet east of the facility. The MFLBC originates upstream of the facility in Salem, Ohio, and flows north for about five miles, turns and flows eastward and then southeastward. The runoff migrates to the MFLBC primarily via a tributary of the MFLBC, known as “Feeder Creek” that runs through the facility property and joins the MFLBC at approximately River Mile (“RM”) 37.6. Contaminated groundwater is located under the Nease facility and migrates towards the east, beneath the adjacent industrial property (often shown in Site documents as the “Crane-Deming Company”), with a smaller plume to the southeast. The former Crane-Deming facility also has some contaminated soil in areas on the west side of the building where shallow groundwater seeps to the surface.

11. From 1961 until 1973, a portion of the Site was owned and operated by the Nease Chemical Company as a chemical manufacturing plant producing specialty chemicals such as pesticides, fire retardants, household cleaning compounds and chemical intermediates used in agricultural, pharmaceutical and other chemical products. Some wastes from the plant processes were put into 55-gallon drums, which were buried on-site (particularly in Exclusion Area A). Five unlined ponds (designated Ponds 1, 2, 3, 4 and 7) were used for the treatment and storage of process wastewater. After settling in the ponds, neutralized liquids were discharged to the Salem

Wastewater Treatment Plant from the late 1960s to 1973. Following notification by Ohio EPA of wastewater violations, Nease Chemical Company agreed in a Consent Judgment in 1973 to discontinue manufacturing operations at the facility until such time as it obtained a new wastewater permit from Ohio EPA. Subsequent to the Consent Judgement, Nease decided to close the facility. Nease neutralized and removed water in the various ponds to the Salem Wastewater Treatment Plant and filled/graded the ponds by December 31, 1975. In addition, Nease removed the majority of buildings and manufacturing equipment during decommissioning activities. Only one building remains at the former manufacturing facility, which currently houses the groundwater treatment system.

12. The Nease Chemical Site was listed on the National Priorities List ("NPL") pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on September 8, 1983.

13. On December 30, 1977, the assets of Nease Chemical Company (including the non-operational Salem facility) were acquired and the company merged with Ruetgers Chemicals, Inc. to form Ruetgers-Nease Chemical Company, Inc. (now known as Rutgers Organics Corporation or "ROC"). ROC, the owner, has never operated at the Site. Since 1982, ROC has cooperated with Ohio EPA and EPA to address the Site.

14. There have been some prior response and enforcement actions at the Site:

a. In 1983, ROC voluntarily implemented various steps including the removal of drums and associated affected soils. A total of 115 drums were removed from Exclusion Area A. Additionally, more than 9,500 cubic yards of contaminated soil were removed from Exclusion Areas A and B, Pond 1, and a nearby ditch. The soil and drums were disposed at an off-site hazardous waste landfill. At the same time efforts were made to control contaminated sediment from leaving the Site. The efforts included seeding of former Pond 2, installation of fabric barriers across drainage swales and ditches, installation of rock dams, and hay-bale barriers.

b. In January 1988, an AOC was signed by ROC, Ohio EPA and EPA, which required ROC to conduct a Remedial Investigation/Feasibility Study ("RI/FS") for the Site. Subsequently, ROC conducted the RI under the Agencies' oversight, and has submitted a series of RI reports and appendices. In April 2004 and February 2005, ROC submitted the final Endangerment Assessment and FS for OU 2, respectively. Replacement pages with revisions were provided to EPA and Ohio EPA on September 13, 2004 for the April 2004 Endangerment Assessment, and on May 11, 2005 for the FS. The RI/FS formed the basis for the ROD issued for OU 2.

c. In late 1991, ROC instituted further stabilization measures to reduce potential off-site transport of contaminants. Additional surface water diversion measures, berms and sediment control structures were constructed.

d. Under an agreement with EPA, starting in 1993 ROC took measures to control leachate releases and seeps. To reduce potential discharge of shallow groundwater to the ground surface, a collection trench and aggregate drain downgradient from Exclusion Area A (leachate collection system - called "LCS-1") and a collection drain and recovery well immediately downgradient of Ponds 1 and 2 ("LCS-2") were constructed. Shallow groundwater from LCS-1



is presently pumped to the on-site treatment plant. Shallow groundwater collected from LCS-2 is transported off-site for treatment and disposal (due to high metals levels). Since the start of operations, over 20 million gallons of contaminated shallow groundwater have been captured and treated. In addition, to prevent runoff, water in Pond 1 is periodically pumped out and treated.

15. Hazardous substances are found at OU 3 in several media:

a. Feeder Creek

Feeder Creek sediment samples were collected during the RI and in a subsequent study in 1996. During the RI sediment samples were collected from seven locations. Mirex concentrations ranged from 0.38 to 129 mg/kg. During the 1996 sampling, sediment was analyzed for depth-discrete samples (0-3, 3-6, 6-10, and 10-14 inches below the surface) at six locations. Mirex was highest in the top six inches, with a maximum detection of 0.845 mg/kg.

b. MFLBC Sediment

The first major sediment sampling effort on the MFLBC was conducted in 1990 as part of the RI work and included 42 sediment samples. The highest mirex concentrations were detected between river miles 31.4 and 35 with a maximum concentration of 1.68 mg/kg. Mirex was detected in sediments as far downstream as RM 1.9, but at much lower concentrations. As part of the RI, in 1993-1995, 19 additional sediment samples were taken from the MFLBC in conjunction with soil samples collected from adjacent floodplains. Mirex concentrations in 1993-1995 were consistent with those found in 1990, with the highest concentrations between RM 32 and RM 35.5 and a maximum detection of 1.19 mg/kg. Additional sampling occurred in 1999 and the results show a trend similar to the previous sampling, i.e., the highest concentrations were detected in the upstream portion of the stream near the former Nease facility and lower concentrations were measured downstream. In 2005, mirex was detected in 18 of 19 surface sediment samples. The highest detections were between RM 37 and RM 33.3 with a maximum concentration of 2.03 mg/kg at RM 35.4.

c. MFLBC Floodplain Soils

During the RI, ROC conducted floodplain soil sampling in three primary phases. Phase I was in 1990, and used transects across the floodplain. Each transect included two samples of the top 1 foot of soil from either bank (total of four samples per transect). This sampling approach confirmed that floodplain soils closer to the creek are more likely to have higher concentrations of mirex. In 1993, Phase II of the RI was conducted, which included "grid" sampling in three areas along the stream. These areas were selected due to the expectation that there was significant deposition in these areas based on 1990 sampling results. In 1995, Phase III sampling was conducted to address areas where samples had not previously been collected. Separate from ROC's RI work, in August 1991, Ohio EPA collected samples from an area known as Colonial Villa (approximately RM 35.4) where there was a potential for exposure to nearby residents. Discrete samples were collected from 0-6 inch and 6-12 inch depths at each sample location. Results for these samples showed mirex concentrations ranging from non-detect to 6.65 mg/kg (the maximum value detected in floodplains), with mirex concentrations consistently decreasing with depth. Additional floodplain soil sampling was conducted in September 2006. The

agencies and ROC selected several floodplain soil locations where RI results showed elevated mirex concentrations or where significant potential for human exposure exists (e.g. public parks, dairy farms, and residential areas). A total of 10 primary floodplain locations were assessed using composite samples. The 2006 results generally confirm the floodplain soil sampling data collected during the RI. The maximum value was about 3 mg/kg, found in a duplicate sample near Colonial Villa. Similar to sediment, the main areas of contaminated floodplain soil are in certain locations along the approximately 6 ½ mile reach from RM 31 to RM 37.6.

d. MFLBC Fish

Since 1987, ROC and/or Ohio EPA conducted several significant fish sampling events. The 1987 event included fillet and whole body data. Fillet mirex concentrations ranged from non-detect to 0.37 mg/kg with no detections of mirex downstream of RM 17.5. In 1990, as part of the RI, 27 whole-body fish and 26 fish fillet samples were collected from the MFLBC and other nearby surface water bodies. Mirex was detected in all MFLBC fillet samples with concentrations ranging from 0.0193 mg/kg to 1.82 mg/kg. In 1999, an additional 18 fish fillet samples were collected and analyzed by ROC. Although reported concentrations were lower than in previous events, the distribution of mirex appears to be similar. In addition, fillet testing performed by Ohio EPA in 1997-2001 confirms that mirex concentrations have remained relatively low downstream of RM 25.5. ROC and Ohio EPA jointly collected additional fish tissue samples in 2005 in preparation for the OU 3 FS. Ohio EPA's mirex results show a range of concentrations from about 0.07 to 1.64 mg/kg and the maximum detection was found within approximately 1 river mile of the maximum detection from the 1990 investigation. From the complete fish fillet data set (i.e., all years combined), only one fish fillet sample location (from 1990) had a mirex concentration above 0.8 mg/kg downstream of approximately RM 31.5. These results indicate that the area of highest fish tissue mirex concentrations generally coincides with the highest mirex concentrations in sediment. In addition to the fillet sample results described above, several investigations have included analyses of whole-body fish samples, which are relevant to ecological food chain exposure pathways. The most significant whole-body fish data set is from 1990, when the majority of samples showed mirex concentrations of 1.0 mg/kg and less. The only three samples that exceeded 1.0 mg/kg were of common carp, including the maximum detection of 6.2 mg/kg. Other investigations in 1985, 1987, and 2001 show similar concentrations to those measured in 1990. Whole body samples collected in 2001 at and downstream of Lisbon Dam (RM 12.5) had concentrations of approximately 0.2 mg/kg and less.

16. The conceptual site model ("CSM") provides an understanding of the Site based on the sources of the contaminants of concern, potential transport pathways and environmental receptors. Based on the nature and extent of the contamination and the fate and transport mechanisms described in the RI, FS, and Endangerment Assessment Reports, EPA's description of the CSM for OU 3 includes the following components:

- Chemical contaminants from operations in the 1960s and early 1970s at the Nease Chemical plant were released to the environment. Wastewater was stored in five unlined ponds. Drums were disposed on-site. It is likely that spills occurred.

- Over time, leaking drums, runoff, and/or spills spread contamination to the facility soils. Some interim cleanup actions were conducted to remove buried drums and the most highly contaminated soil. However, surface soil over portions of the old Nease facility remains contaminated. These soils will be addressed under the selected OU 2 remedy.
- The primary contaminant of concern in OU 3 is mirex.
- Feeder Creek is the main route of surface water drainage from the former plant. Runoff carried contaminants from surface soil into Feeder Creek and on into the MFLBC. It is likely that mirex contamination remained bound to soil particles suspended in surface water.
- Mirex contaminated soil particles settled as sediment into areas of the MFLBC that were conducive to sediment deposition. Over time, relatively low amounts of mirex-contaminated sediment were transported further downstream.
- During flooding events, some of the contaminated sediment washed up and deposited in floodplain soil. There is little evidence of significant erosion of contaminated floodplains back into the MFLBC, although this could occur in certain areas.
- Biota in the MFLBC (e.g., fish) and along the contaminated floodplains (e.g., grazing cattle) bioaccumulate mirex.
- Consumers of contaminated biota would be exposed to mirex. Also, small mammals living in the contaminated floodplains would be exposed to mirex through the food chain and via direct contact.

17. The response action at OU 3 of the Nease Chemical Site is warranted because, using reasonable maximum exposure assumptions, the cumulative excess lifetime carcinogenic risk to human health exceeds  $10^{-4}$  for the future residential and future recreational use scenarios along the MFLBC and for the future residential scenario at the off-facility portion of the Site (the former Crane Deming property adjacent to the Nease plant). In addition, a hazard quotient of one is exceeded for the same use scenarios, indicating the potential for non-carcinogenic risk. The exposure pathways that result in potential future unacceptable human health risk are associated with the ingestion of fish, beef, and/or milk.

18. The Endangerment Assessment of 2004 discusses the human health and ecological concerns associated with mirex, volatile organic compounds, semi-volatile organic compounds, and other contaminants of concern identified at the Site.

## **V. CONCLUSIONS OF LAW AND DETERMINATIONS**

Based on the Findings of Fact set forth above, as well as the ROD and Administrative Record for OU 3 of this Site, EPA has determined that:

19. The Nease Chemical Site is a “facility” as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

20. The contamination found at OU 3 of the Site, as identified in the Findings of Fact above, includes [a] “hazardous substance(s)” as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

21. The Respondent is a “person” as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

22. The Respondent is a responsible party as defined in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is subject to this Settlement Agreement under Section 106(a) of CERCLA, 42 U.S.C. § 9606(a). Respondent is liable for performance of response action under the Settlement Agreement and for response costs incurred, and to be incurred, at the Site. Respondent, ROC is the “owner” and/or “operator” of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

23. The conditions described in Section IV (Findings of Fact) above constitute an actual or threatened “release” of hazardous substances from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

## **VI. SETTLEMENT AGREEMENT AND ORDER**

24. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for OU 3 of this Site, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

## **VII. DESIGNATED PROJECT MANAGER AND COORDINATORS**

25. Respondent has retained the following contractor to perform the Work and to serve as Supervising Contractor:

Golder Associates, Inc.  
200 Century Parkway  
Suite C  
Mt. Laurel, NJ 08054  
Phone: (856) 793-2005

Respondent shall also notify EPA and Ohio EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 15 days prior to commencement of such Work. EPA, after a reasonable opportunity for review and comment by Ohio EPA, retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify EPA and Ohio EPA of that contractor’s name and qualifications within 21 days of EPA’s disapproval. With respect to any contractor proposed to be Supervising Contractor, Respondent shall demonstrate that the proposed contractor has a quality system that complies with ANSI/ASQC E4-1994, “Specifications and Guidelines for

Quality Systems for Environmental Data Collection and Environmental Technology Programs,” (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor’s Quality Management Plan (QMP) upon request of EPA. The QMP should be prepared in accordance with “EPA Requirements for Quality Management Plans (QA/R-2)” (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

26. Respondent designates the following Project Coordinator:

Dr. Rainer Domalski  
RUTGERS Organics Corporation  
201 Struble Road  
State College, PA 16801  
Phone: (814) 231-9200

The Project Coordinator shall be responsible for administration of all actions by Respondent required by this Settlement Agreement. To the greatest extent possible, the Project Coordinator shall be readily available during the Work. The Project Coordinator or his designee shall be on-site during the field work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA and Ohio EPA of that person’s name, address, telephone number, and qualifications within 21 days following EPA’s disapproval. Receipt by Respondent’s Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by the Respondent.

27. Agency Project Coordinators

a. EPA has designated Mary Logan of the Superfund Division, Region 5 as its Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to:

Mary P. Logan, RPM  
U.S. EPA, Superfund Division  
77 West Jackson, SR-6J  
Chicago, Illinois 60604-3590

b. Ohio EPA has designated Sheila Abraham of the Division of Emergency and Remedial Response as its Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to:

Sheila Abraham, Site Coordinator/ES-3  
Ohio EPA, Division of Emergency and Remedial Response  
Northeast District Office  
2110 East Aurora Road  
Twinsburg, Ohio 44087

28. EPA’s Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (“RPM”) and On-Scene Coordinator (“OSC”) by the NCP. In addition, EPA’s

Project Coordinator shall have the authority, consistent with the NCP, to halt any Work required by this Settlement Agreement and to take any necessary response action when the Project Coordinator determines that conditions at the Site may present an immediate endangerment to public health, welfare, or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

29. EPA, Ohio EPA, and Respondent shall have the right, subject to Paragraph 26, to change their respective designated Project Coordinators. Respondent shall notify EPA and Ohio EPA 21 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

### **VIII. WORK TO BE PERFORMED**

30. Respondent shall perform all action necessary to implement the SOW.

31. Work Plans and Implementation.

a. In accordance with the schedule in the SOW, the Respondent shall submit to EPA and Ohio EPA a work plan for the pre-design investigation needed to support the RD and RA at OU 3 (“OU 3 Pre-Design Investigation Work Plan” or “OU 3 PDI Work Plan”). The PDI Work Plan shall provide for pre-design support of the remedy set forth in the OU 3 ROD, in accordance with the SOW and this Settlement Agreement. Upon its approval or modification by EPA pursuant to Section IX (EPA Approval of Plans and Other Submissions), the OU 3 PDI Work Plan shall be incorporated into and become enforceable under this Settlement Agreement.

b. The OU 3 PDI Work Plan shall include plans and schedules for implementation of all pre-design tasks identified in the SOW, including, but not limited to, plans and schedules for the completion of: evaluation of the current MFLBC sediment mirex distribution between RM 37.6 through 31; evaluation of the current MFLBC floodplain mirex distribution between RM 37.6 through 31; sampling and analysis of both whole body and fillet fish samples for mirex and lipids to provide a baseline sampling event consistent with the anticipated Operation and Maintenance (“O&M”) monitoring program; and wetland and floodplain assessments to evaluate potential construction impacts.

c. Upon approval or modification of the OU 3 PDI Work Plan by EPA pursuant to Section IX (EPA Approval of Plans and Other Submissions), Respondent shall implement the OU 3 PDI Work Plan and conduct OU 3 PDI activities in accordance with the OU 3 PDI Work Plan and the SOW. Respondent shall submit to EPA and Ohio EPA all plans, submittals, and other deliverables required under the approved OU 3 PDI Work Plan in accordance with the approved schedule for review. Unless otherwise directed or approved by EPA, Respondent shall not commence further Pre-Design activities at OU 3 of the Site prior to approval of the OU 3 PDI Work Plan.

d. In accordance with the schedule in the SOW, Respondent shall submit to EPA and Ohio EPA a work plan for the design of the RA at OU 3 of the Site (“OU 3 Remedial Design Work Plan” or “OU 3 RD Work Plan”). The OU 3 RD Work Plan shall provide for design of the

remedy set forth in the ROD, in accordance with the SOW and for achievement of the Performance Standards and other requirements set forth in the ROD, this Settlement Agreement, and/or the SOW. Upon its approval or modification by EPA pursuant to Section IX (EPA Approval of Plans and Other Submissions), the RD Work Plan shall be incorporated into and become enforceable under this Settlement Agreement.

e. The OU 3 RD Work Plan shall include plans and schedules for implementation of all remedial design tasks identified in the SOW, including, but not limited to, plans and schedules for the completion of: (1) design sampling and analysis plan including, but not limited to, a Remedial Design Quality Assurance Project Plan ("RD QAPP") in accordance with Paragraph 39 (Quality Assurance and Sampling); (2) a Construction Quality Assurance Plan; (3) a preliminary design submittal; and (4) a final design submittal. In addition, the OU 3 RD Work Plan shall include a schedule for completion of the RA Work Plan.

f. Upon approval or modification of the OU 3 RD Work Plan by EPA pursuant to Section IX (EPA Approval of Plans and Other Submissions), Respondent shall implement the OU 3 RD Work Plan and conduct RD activities in accordance with the OU 3 RD Work Plan and the SOW. Respondent shall submit to EPA and Ohio EPA all plans, submittals, and other deliverables required under the approved OU 3 RD Work Plan in accordance with the approved schedule for review. Unless otherwise directed or approved by EPA, Respondent shall not commence further RD activities at OU 3 of the Site prior to approval of the OU 3 RD Work Plan.

g. For each document, Respondent shall submit the number of copies requested by EPA and Ohio EPA of all plans, reports, or other submissions required by this Settlement Agreement, the Statement of Work, or any approved work plan. Also, upon request by EPA and/or Ohio EPA, Respondent shall submit such documents in electronic form.

32. Health and Safety Plan. Within the OU 3 PDI Work Plan, Respondent shall prepare and submit to EPA and Ohio EPA for review and comment a plan that ensures the protection of the public health and safety during performance of on-Site pre-design and design work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA, and shall implement the plan during the pendency of the PDI and RD.

33. Respondent shall conduct all work in accordance with the SOW, the OU 3 ROD, CERCLA, the NCP, and applicable or relevant and appropriate standards, limitations, criteria, and requirements as identified in the OU 3 ROD.

34. Respondent shall perform the tasks and submit the deliverables set forth in the SOW. EPA, after a reasonable opportunity for review and comment by Ohio EPA, will approve, approve with conditions, modify, or disapprove each deliverable that Respondent submits under this Settlement Agreement and the SOW, pursuant to Section IX (EPA Approval of Plans and Other Submissions). Each deliverable must include all listed items in the SOW as well as items

that the planning document (the OU 3 PDI Work Plan and the OU 3 RD Work Plan) indicates Respondent shall prepare and submit for review and approval.

35. Upon EPA's approval or modification, this Settlement Agreement incorporates any reports, plans, specifications, schedules, and attachments that this Settlement Agreement or the SOW requires. With the exception of extensions that EPA, after a reasonable opportunity for review and comment by Ohio EPA, allows in writing or certain provisions within Section XVII of this Settlement Agreement (*Force Majeure*), any non-compliance with such EPA-approved or modified reports, plans, specifications, schedules, and attachments shall be considered a violation of this Settlement Agreement and EPA can seek stipulated penalties for such violation in accordance with Section XVIII of this Settlement Agreement (Stipulated Penalties).

36. If any unanticipated or changed circumstances exist at the Site that may significantly affect the Work or schedule, Respondent shall notify the Agency Project Coordinators by telephone within 24 hours of discovery of such circumstances. Such notification is in addition to any notification required by Section XVII (*Force Majeure*).

37. If EPA, after a reasonable opportunity for comment by Ohio EPA, determines that additional tasks, including, but not limited to, additional investigatory work or engineering evaluation, are necessary to complete the Work, EPA shall notify Respondent in writing. Respondent shall submit a workplan to EPA and Ohio EPA for the completion of such additional tasks within 30 days of receipt of such notice, or such longer time as EPA agrees. The workplan shall be completed in accordance with the same standards, specifications, and requirements for other deliverables pursuant to this Settlement Agreement. EPA, after a reasonable opportunity for review and comment by Ohio EPA, will review and comment on, as well as approve, approve with conditions, modify, or disapprove the workplan pursuant to Section IX (EPA Approval of Plans and Other Submissions). Upon approval or approval with modifications of the workplan, Respondent shall implement the additional work in accordance with the schedule of the approved workplan. Failure to comply with this Subsection, including, but not limited to, failure to submit a satisfactory workplan, shall subject Respondent to stipulated penalties as set forth in Section XVIII (Stipulated Penalties). Additional work may only be required pursuant to this Paragraph to the extent that it is consistent with accomplishing the PDI or design of the RA for OU 3.

38. Quality Assurance and Sampling.

a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analysis participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements



for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001), or equivalent documentation as determined by EPA.

b. Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Respondent shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondent shall notify EPA not less than 15 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that it deems necessary. Upon request, EPA shall allow Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent's implementation of the Work.

d. Respondent shall summarize and submit to EPA and Ohio EPA the results of all sampling and/or tests or other analytical data that it generated, or was/were generated on its behalf, with respect to implementing this Settlement Agreement in the monthly progress reports that the SOW requires. Respondent shall maintain custody of all information and data that the Final Design Document and any required deliverable relied upon or referenced. Upon EPA or Ohio EPA's request, Respondent shall provide such information and data.

e. If, at any time during the RD process, Respondent becomes aware of the need for additional data beyond the scope of the approved Work Plans, Respondent shall have an affirmative obligation to submit to the Agency Project Coordinators, within 30 days, a memorandum documenting the need for additional data.

39. Community Relations Plan. EPA will prepare a community relations plan, in accordance with EPA guidance and the NCP. As requested by EPA, Respondent shall provide information supporting EPA's community relations plan and shall participate in the preparation of such information for dissemination to the public and in public meetings that may be held or sponsored by EPA to explain activities at, or concerning, the Site.

40. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during performance of the Work, which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release and shall immediately notify the EPA Project Coordinator, or, in the event of his/her unavailability, the OSC, or the Regional Duty Officer, U.S. EPA Region 5 Emergency Planning and Response Branch at (Tel: (312) 353-2318) of the incident or Site conditions. Respondent shall also notify the Ohio EPA Coordinator and Ohio EPA's Spill Hotline at 1-800-282-9378. Respondent shall take such actions in consultation with EPA's Project Coordinator, or other available authorized EPA officer, and in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Respondent fails to take appropriate response action as

required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP, pursuant to Section XV (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the National Response Center at (800) 424-8802 and Ohio EPA's Spill Hotline at 1-800-282-9378. Respondent shall submit a written report to EPA and Ohio EPA within 7 days after each release, setting forth the events that occurred and the measures taken, or to be taken, to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*, Ohio Revised Code Chapter 3750-25, and any other applicable federal or state law or regulation.

## **IX. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS**

41. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondent, EPA, after a reasonable opportunity for review and comment by Ohio EPA, shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent will modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

42. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraph 41(a), (b), (c), or (e), Respondent shall proceed to take any action required by the plan, report, or other deliverable, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XVI (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA, after a reasonable opportunity for comment by Ohio EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 41(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVIII (Stipulated Penalties).

### **43. Resubmission.**

a. Upon receipt of a notice of disapproval, approval with conditions, and/or direction to modify, Respondent shall, within 30 days or such longer time as agreed to or specified by EPA in such notice, correct any deficiencies and/or incorporate any comments cited by EPA and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVIII, shall accrue during the 30-day period

or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 44 and 45.

b. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise agreed to or directed by EPA, after a reasonable opportunity for comment by the Ohio EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVIII (Stipulated Penalties).

c. Unless otherwise agreed by EPA, until EPA approves, approves with conditions or modifies the OU 3 PDI Work Plan, the OU 3 RD Work Plan, or the Preliminary Design, Respondent shall not proceed further with any subsequent activities or tasks related to such work plan. While awaiting EPA agreement, approval, approval on condition, or modification of the deliverable, Respondent shall proceed with all other tasks and activities that may be conducted independently of this deliverable, in accordance with the schedule set forth under this Settlement Agreement.

d. For all remaining deliverables not listed above in Subparagraph 43(c), Respondent shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity, or deliverable at any point.

44. If EPA disapproves a resubmitted plan, report, or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report, or other deliverable, after a reasonable opportunity for review and comment by Ohio EPA. Respondent shall implement any such plan, report, or deliverable as corrected, modified, or developed by EPA, subject only to Respondent's right to invoke the procedures set forth in Section XVI (Dispute Resolution).

45. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately, unless Respondent invokes the dispute resolution procedures in accordance with Section XVI (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XVI (Dispute Resolution) and Section XVIII (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified, or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XVI, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVIII.

46. In the event that EPA takes over some of the tasks, Respondent shall incorporate and integrate information supplied by EPA into the final reports, subject only to its right to invoke the Dispute Resolution procedures set forth in Section XVI (Dispute Resolution).

47. All plans, reports, and other deliverables submitted to EPA and Ohio EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA and Ohio EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and become enforceable under this Settlement Agreement.

## **X. PROGRESS REPORTS**

### **48. Periodic Reporting.**

a. Respondent shall submit a written progress report to EPA and Ohio EPA concerning actions undertaken pursuant to this Settlement Agreement by the 10<sup>th</sup> day of every month after the Effective Date until termination of this Settlement Agreement, unless otherwise directed in writing by the EPA Project Coordinator. These reports may be combined with those required by previous EPA orders and shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, summaries of analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondent shall report all communications that it has with local, state, or other federal authorities related to the Work in the monthly progress reports.

49. Notice of Completion of Work. Within 15 days after completion of all Work required by this Settlement Agreement, Respondent shall submit to EPA and Ohio EPA a notice that all Work has been completed. The notice shall include the following certification signed by a person who supervised or directed Respondent's assessment of Work completion:

To the best of my knowledge, after thorough investigation, I certify that the information contained in, or accompanying, this submission is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

## **XI. SITE ACCESS AND INSTITUTIONAL CONTROLS**

50. If the Respondent owns or controls the Site, or any other property where access is needed to implement this Settlement Agreement, it shall, commencing on the Effective Date, provide EPA, Ohio EPA, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, to conduct any activity related to this Settlement Agreement. The Respondent shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to EPA and Ohio EPA of the proposed conveyance, including the name and address of the transferee. The Respondent also agrees to require that its successors comply with the immediately preceding sentence, this Section, and Section XII (Access to Information).

51. Where any action under this Settlement Agreement is to be performed in areas owned by, or in possession of, someone other than the Respondent, the Respondent shall use its best efforts to obtain all necessary access agreements within 45 days after the Effective Date, or as otherwise specified in writing by the EPA Project Coordinator. Respondent shall immediately notify EPA and Ohio EPA if, after using its best efforts, it is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).

52. Notwithstanding any provision of this Settlement Agreement, EPA and Ohio EPA retain all of their access authorities and rights, as well as all of its/their rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

53. If Respondent cannot obtain access agreements, EPA may obtain access for Respondent, or perform those tasks or activities with EPA contractors. If EPA performs those tasks or activities with EPA contractors, Respondent shall perform all other activities not requiring access to that site and shall reimburse EPA for all costs incurred in performing such activities. Respondent shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables, subject only to its right to invoke the Dispute Resolution procedures set forth in Section XVI (Dispute Resolution).

## **XII. ACCESS TO INFORMATION**

54. Respondent shall provide to EPA and Ohio EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA and Ohio EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

55. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to EPA, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondent asserts business confidentiality claims.

Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to Ohio EPA under this Settlement Agreement to the extent permitted by and in accordance with applicable Ohio statutes and regulations. Documents or information determined to be confidential by Ohio EPA will be afforded the protection specified in the applicable Ohio statutes and regulations. If no claim of confidentiality accompanies documents or information when it is submitted to Ohio EPA, or if Ohio EPA has notified Respondent that the documents or information are not confidential under the standards of Ohio statutes and regulations, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondent asserts business confidentiality claims.

56. Respondent may assert that certain documents, records, and other information submitted to EPA are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: a) the title of the document, record, or information; b) the date of the document, record, or information; c) the name and title of the author of the document, record, or information; d) the name and title of each addressee and recipient; e) a description of the contents of the document, record, or information; and f) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

Respondent may assert that certain documents, records, and other information submitted to Ohio EPA are privileged under the attorney-client privilege or any other privilege recognized by applicable Ohio statutes and regulations. If the Respondent asserts such a privilege in lieu of providing documents, it shall provide Ohio EPA with the following: a) the title of the document, record, or information; b) the date of the document, record, or information; c) the name and title of the author of the document, record, or information; d) the name and title of each addressee and recipient; e) a description of the contents of the document, record, or information; f) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

57. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at, or around, the Site.

### **XIII. RECORD RETENTION**

58. During the pendency of this Settlement Agreement and until 10 years after the Respondent's receipt of EPA's notification that work has been completed, Respondent shall preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance

of the Work under this Settlement Agreement, or the liability of any person under CERCLA with respect to the Site and nature and extent of contamination at or released from the Site, regardless of any corporate retention policy to the contrary. Until 10 years after notification that work has been completed, Respondent shall also instruct its contractors and agents to preserve all documents, records, and other information of whatever kind, nature, or description relating to performance of the Work.

59. At the conclusion of this document retention period, Respondent shall notify EPA and Ohio EPA at least 90 days prior to the destruction of any such documents, records, or other information and, upon request by EPA or Ohio EPA, Respondent shall deliver any such documents, records, or other information to EPA or Ohio EPA. Respondent may assert that certain documents, records, and other information requested by or submitted to EPA are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: a) the title of the document, record, or other information; b) the date of the document, record, or other information; c) the name and title of the author of the document, record, or other information; d) the name and title of each addressee and recipient; e) a description of the subject of the document, record, or other information; and f) the privilege asserted by Respondent. Respondent may assert that certain documents, records, and other information submitted to Ohio EPA are privileged under the attorney-client privilege or any other privilege recognized by applicable Ohio statutes and regulations. If the Respondent asserts such a privilege in lieu of providing documents, it shall provide Ohio EPA with the following: a) the title of the document, record, or information; b) the date of the document, record, or information; c) the name and title of the author of the document, record, or information; d) the name and title of each addressee and recipient; e) a description of the contents of the document, record, or information; f) the privilege asserted by Respondent. However, no documents, records, or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

60. The Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any records, documents, or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or Ohio EPA or the filing of suit against it regarding the Site, and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

#### **XIV. COMPLIANCE WITH OTHER LAWS**

61. Respondent shall undertake all action that this Settlement Agreement requires in accordance with the requirements of all applicable local, state, and federal laws and regulations, unless an exemption from such requirements is specifically provided by law or in this Settlement Agreement. The activities conducted pursuant to this Settlement Agreement, if approved by EPA, shall be considered consistent with the NCP.

62. Except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and the NCP, no permit shall be required for any portion of the Work conducted entirely on-Site. Where

any portion of the Work requires a federal or state permit or approval, Respondent shall submit timely applications and take all other actions necessary to obtain and to comply with all such permits or approvals.

63. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

## **XV. PAYMENT OF RESPONSE COSTS**

### **64. Payment for Future Response Costs.**

Respondent shall pay EPA all Future Response Costs incurred within the scope of this Settlement Agreement and not inconsistent with the NCP. On a periodic basis EPA will send the Respondent a bill requiring payment that includes an EPA cost summary, which includes direct and indirect costs incurred by EPA and its contractors. Respondent shall make all payments within 60 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 67. Payments to EPA under this Paragraph shall be deposited in the Nease Chemical Site Special Account within the EPA Hazardous Substance Superfund, to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund in the event that they are not needed to finance Site-related actions.

### **65. Payment Instructions.**

Respondent shall make all payments except as otherwise provided in Paragraph 68 according to the following procedures.

a. If the payment amount demanded in the bill is more than \$10,000, payment shall be made to EPA by Electronics Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondent by EPA Region 5. Payment shall be accompanied by a statement identifying the name and address of the party making the payment, the Site name, EPA Region 5, the Site/Spill ID Number 05A3, and the EPA docket number for this action.

b. If the amount demanded is \$10,000 or less, the Respondent may in lieu of the procedures in subparagraph 65(a) make all payments required by Paragraph 64 by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund" referencing the name and address of the party making the payment, the Site/Spill ID Number 05A3. Respondent shall send the check(s) to:

U.S. Environmental Protection Agency  
Superfund Payments  
Cincinnati Finance Center  
PO Box 979076  
St. Louis, MO 63197-9000

c. At the time of payment, Respondent shall ensure that notice that payment has been made (including include copies of the transmittal letter/bank form and the check) is sent to EPA to:



Financial Management Officer  
U.S. Environmental Protection Agency, Region 5  
Mail Code MF-10J  
77 W. Jackson Blvd.  
Chicago, IL 60604

And copies to:

Mark Palermo  
Site Attorney  
Office of Regional Counsel  
Mail Code C-14J  
77 West Jackson  
Chicago, IL 60604-3590

Mary Logan  
Remedial Project Manager  
Superfund Division  
Mail Code SR-6J  
77 West Jackson  
Chicago, IL 60604-3590

66. In the event that the payments to EPA for Future Response Costs are not made within 60 days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.

67. Disputes Regarding Future Response Costs.

Respondent may contest payment of any Future Response Costs billed under Paragraph 64, if it determines that EPA has made an accounting error, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP or outside the scope of this Settlement Agreement. Such objection shall be made in writing within 30 days after Respondent receives the bill and must be sent to the EPA Project Coordinator. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. After submittal of such objection the Parties shall make a good-faith attempt to resolve the bill dispute informally within the 60-day period after Respondent receives the bill. In the event an objection is not resolved, Respondent shall within the 60-day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 65. In addition, Respondent shall within the 60-day period establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Ohio and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XVI (Dispute Resolution). If EPA prevails in the dispute, within 10 days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in

Paragraph 65. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay within 10 days of the resolution of the dispute, that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in Paragraph 65. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs. Stipulated penalties for non-payment of contested response costs shall not accrue during the pendency of dispute resolution provided that Respondent fully complies with this Paragraph.

## **XVI. DISPUTE RESOLUTION**

68. Unless this Settlement Agreement expressly provides otherwise, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

### **69. Dispute Process.**

If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA in writing of its objection(s) within 30 days of notice of such action, unless the objection(s) has/have been resolved informally. The Parties shall have 30 days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended by agreement of the Parties.

### **70. Resolution.**

Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, the Division Director for the Office of Superfund, EPA Region V will issue a written decision on the dispute to Respondent, with a copy also provided to the Ohio EPA. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Unless otherwise agreed by the Parties, Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. Respondent shall proceed in accordance with EPA's final decision regarding the matter in dispute, regardless of whether Respondent agrees with the decision.

## **XVII. FORCE MAJEURE**

71. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, a *force majeure* is defined as

any event arising from causes beyond the control of Respondent, or of any entity controlled by Respondent, including, but not limited to, its contractors and subcontractors, that delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercises "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential *force majeure* event: (a) as it is occurring; and (b) following the potential *force majeure* event, such that the delay is minimized to the greatest extent possible. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

72. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA and Ohio EPA orally within 2 business days of when Respondent first knew that the event might cause a delay. Within 14 days thereafter, Respondent shall provide to EPA and Ohio EPA in writing: an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of the Respondent, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, or Respondent's contractors knew or should have known.

73. If EPA agrees, after a reasonable opportunity to review and comment by Ohio EPA, that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA, after a reasonable opportunity to review and comment by Ohio EPA, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing, copying Ohio EPA, of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event. Respondent shall comply with EPA's decision regarding a claim of *force majeure*, subject only to its right to invoke the Dispute Resolution procedures set forth in Section XVI (Dispute Resolution).

## **XVIII. STIPULATED PENALTIES**

74. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 75 and 76 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (*Force Majeure*). "Compliance" by Respondent shall include completion of the activities under this Settlement Agreement or any work plan or other plan approved or modified by EPA under this Settlement Agreement in

accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved or modified by EPA pursuant to this Settlement Agreement and within the specified time schedules established by or approved under this Settlement Agreement or any work plan or other plan approved or modified by EPA under this Settlement Agreement, subject to extensions agreed to by EPA.

75. Stipulated Penalty Amounts – Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with the Settlement Agreement requirements identified in Paragraph 75 b.:

<b><u>Penalty Per Violation (Per Day)</u></b>	<b><u>Period of Noncompliance (Days)</u></b>
\$500	1-14
\$1,000	15-30
\$3,000	31 and beyond

- b. (1) Payment of Future Response Costs;
- (2) Establishment of escrow accounts in the event of disputes;
- (3) Performance of a work obligation specified under this Settlement Agreement, the SOW, approved or modified OU 3 PDI or OU 3 RD Work Plans, or any other approved or modified reports, plans, specifications, schedules, and attachments under this Settlement Agreement.

76. Stipulated Penalty Amounts - Planning Documents, Reports and Technical Memoranda.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with the Settlement Agreement requirements identified in Paragraph 76 b.

<b><u>Penalty Per Violation (Per Day)</u></b>	<b><u>Period of Noncompliance (Days)</u></b>
\$1,500	1-14
\$2,000	15-30
\$4,000	31 and beyond

- b. (1) Submittal of Draft OU 3 PDI Plan.
- (2) Submittal of Final OU3 PDI Plan.

- (3) Submittal of Pre-design Technical Memoranda.
- (4) Submittal of Draft OU 3 RD Plan.
- (5) Submittal of Final OU 3 RD Plan.
- (6) Submittal of Preliminary Design Documents.
- (7) Submittal of Final Design Documents.

77. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 87, Respondent shall be liable for a stipulated penalty in the amount of \$50,000.

78. All penalties shall begin to accrue on the day after the complete performance is due, or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: a) with respect to non-payment of contested response costs, the provisions of Paragraph 67 apply; b) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31<sup>st</sup> day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and c) with respect to a decision by the EPA Management Official at the at the Superfund Branch Chief level or higher, under Paragraph 70 of Section XVI (Dispute Resolution), during the period, if any, beginning on the 21<sup>st</sup> day after the Negotiation Period begins until the date Respondent is notified of a final decision issued by an EPA management official regarding such dispute. In the event that EPA modifies, corrects or develops a report or deliverable required under this Settlement Agreement and does not require resubmission of that report or deliverable, stipulated penalties for that report or deliverable shall cease to accrue on the date of such decision by EPA. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

79. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA shall give Respondent written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.

80. Respondent shall pay EPA all penalties accruing under this Section within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to:

U.S. Environmental Protection Agency  
Superfund Payments  
Cincinnati Finance Center  
PO Box 979076  
St. Louis, MO 63197-9000

The payment shall indicate that the payment is for stipulated penalties, and shall reference the Site name, EPA Region and Site/Spill ID Number (05A3), the title of this Settlement Agreement, and the name and address of the party making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to:

Mark Palermo  
Site Attorney  
Office of Regional Counsel  
Mail Code C-14J  
77 West Jackson  
Chicago, IL 60604-3590

Mary Logan  
Remedial Project Manager  
Superfund Division  
Mail Code SR-6J  
77 West Jackson  
Chicago, IL 60604-3590

81. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

82. Penalties shall continue to accrue during any dispute resolution period but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision. With respect to non-payment of contested future response costs, the provisions of paragraph 67 apply.

83. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 80. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 87. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

## **XIX. COVENANTS NOT TO SUE BY EPA**

84. a. In consideration of the actions that Respondent will perform and the payments that Respondent will make under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs.

b. These covenants not to sue shall take effect upon the Effective Date and are conditioned upon Respondent's complete and satisfactory performance of all obligations under

this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV. These covenants not to sue extend only to the Respondent and do not extend to any other person.

## **XX. RESERVATION OF RIGHTS BY EPA**

85. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA, the United States, or the State to take, direct, or Settlement Agreement all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, except as specifically provided in this Settlement Agreement, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

86. The covenants not to sue set forth in Section XIX above do not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition(s) of Future Response Costs;
- c. liability for performance of response action other than the Work;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred, or to be incurred, by the Agency for Toxic Substances and Disease Registry related to the Site.

87. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may assume the performance of any or all portion(s) of the Work as EPA determines necessary. EPA shall not assume performance of any portion of the Work until 15 days after providing Respondent notice of the work takeover, unless EPA determines that a delay could potentially cause an endangerment to human health or

the environment. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs that the United States incurs in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XV (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

## **XXI. COVENANT NOT TO SUE BY RESPONDENT**

88. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States or its contractors or employees, with respect to the Work, past response actions, Future Response Costs, or this Settlement Agreement, including, but not limited to:

- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claim arising out of response actions at, or in connection with, the Site, including any claim under the United States Constitution, the Ohio Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
- c. any claim against the United States or the State pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Future Response Costs.

89. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an Settlement Agreement pursuant to the reservations set forth in Subparagraphs 86(b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

90. Respondent reserves, and this Settlement Agreement is without prejudice to, claims against the United States subject to the provisions of Chapter 171 of Title 28 of the United States Code, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, any such claim shall not include a claim for any damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of Respondent's plans or activities. The foregoing applies only to claims that are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.



91. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

## **XXII. OTHER CLAIMS**

92. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

93. Except as expressly provided in Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of, or release from, any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including, but not limited to, any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

94. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

## **XXIII. CONTRIBUTION**

95. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and Respondent is entitled, as of the Effective Date, to protection from contribution actions, claims provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or claims that may be otherwise provided by law, for “matters addressed” in this Settlement Agreement. The “matters addressed” in this Settlement Agreement are the Work and Future Response Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B), 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Future Response Costs.

c. Nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action

and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

#### **XXIV. INDEMNIFICATION**

96. Respondent shall indemnify, save, and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including, but not limited to, attorneys fees and other expenses of litigation and settlement, arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into, by, or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

97. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

98. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made, or to be made, to the United States, arising from, or on account of, any contract, agreement, or arrangement between the Respondent and any person for performance of Work on, or relating to, the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from, or on account of, any contract, agreement, or arrangement between any one or more of Respondent and any person for performance of Work on, or relating to, the Site.

#### **XXV. INSURANCE**

99. At least 30 days prior to commencing any on-Site Work under this Settlement Agreement, Respondent shall secure and shall maintain for the duration of this Settlement Agreement commercial general liability insurance and automobile insurance with limits of \$2 million dollars, combined single limit, naming the EPA as an additional insured. Upon request, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date upon EPA's request. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then

Respondent need provide only that portion of the insurance described above that is not maintained by such contractor or subcontractor upon request by EPA.

## **XXVI. FINANCIAL ASSURANCE**

100. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of \$ 200,000 in one or more of the following forms, to secure the full and final completion of Work by Respondent:

a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;

b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;

c. a trust fund administered by a trustee acceptable in all respects to EPA – the Parties anticipate that the existing trust fund and trust agreement established on June 8, 2006, between Rutgers Organics Corporation and Deutsche Bank Trust Company Americas for remedial design of OU 2 pursuant to the Settlement Agreement V-W-'06-C-848 will be modified to include financial security for the required OU 3 Work;

d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;

e. a corporate guarantee to perform the Work provided by one or more parent corporations or subsidiaries of Respondent, or by one or more unrelated corporations that have a substantial business relationship with the Respondent; including a demonstration that any such company satisfies the financial test requirements of 40 C.F.R. § 264.143(f); and/or

f. a corporate guarantee to perform the Work by the Respondent, including a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. § 264.143(f).

101. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondent shall, within 45 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 100, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within 45 days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

102. If Respondent seeks to ensure completion of the Work through a guarantee pursuant to Subparagraph 100(e) or 100(f) of this Settlement Agreement, Respondent shall: (i) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. § 264.143(f); and (ii) resubmit sworn statements conveying the information required by 40 C.F.R. § 264.143(f) annually, on the anniversary of the Effective Date, to EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. § 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the current cost estimate of \$380,000 for the Work at OU 3 of the Site shall be used in relevant financial test calculations.

103. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 100 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may change the form of financial assurance required hereunder only in accordance with a final decision resolving such dispute pursuant to Section XVI (Dispute Resolution).

104. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of financial assurance required hereunder only in accordance with a final decision resolving such dispute pursuant to Section XVI (Dispute Resolution).

## **XXVII. INTEGRATION/APPENDICES**

105. This Settlement Agreement, its appendices, and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement.

106. In the event of a conflict between any provision of this Settlement Agreement and the provisions of any document attached to this Settlement Agreement or submitted or approved pursuant to this Settlement Agreement, the provisions of this Settlement Agreement shall control.

107. The following documents are attached to and incorporated into this Settlement Agreement:

- Appendix A is the SOW.
- Appendix B is the Figure of OU 3
- Appendix C is the ROD for OU 3.

## **XXVIII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

108. This Settlement Agreement shall be effective the day the Settlement Agreement is signed by EPA's Director of the Superfund Division or his/her delegatee.

109. This Settlement Agreement may be amended by mutual agreement of EPA and the Respondent. Amendments shall be in writing and shall be effective when signed by EPA. EPA Project Coordinators do not have the authority to sign amendments to the Settlement Agreement.

110. No informal advice, guidance, suggestion, or comment by the EPA and/or Ohio EPA Project Coordinator or other EPA and or Ohio EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

## **XXIX. NOTICE OF COMPLETION OF WORK**

111. When EPA determines, after EPA's receipt of Respondent's notice of completion of work, and after a reasonable opportunity for review and comment by Ohio EPA, that all Work has been fully performed in accordance with the other requirements of this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to payment of Future Response Costs and record retention, EPA will provide written notice to Respondent and Ohio EPA. If EPA determines, after a reasonable opportunity for review and comment by Ohio EPA, that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent and Ohio EPA, provide a list of the deficiencies, and require Respondent to modify the Work Plan if appropriate to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit the required deliverables, subject only to its right to invoke the Dispute Resolution procedures set forth in Section XVI (Dispute Resolution). Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

Agreed this 22<sup>nd</sup> day of June, 2009.

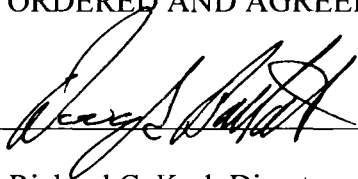
For Respondent Ruetgers Organics Corporation

Signature: Rainer Domalski

Dr. Rainer F. Domalski  
President and CEO  
Ruetgers Organics Corporation  
202 Struble Road  
State College, Pennsylvania 16801

It is so ORDERED AND AGREED this 30<sup>th</sup> day of JUNE, 2009.

BY: \_\_\_\_\_



DATE: \_\_\_\_\_

6/30/09

*for* Richard C. Karl, Director  
Superfund Division  
U.S. Environmental Protection Agency, Region 5

EFFECTIVE DATE: \_\_\_\_\_

6/30/09

**APPENDIX A  
STATEMENT OF WORK  
FOR THE REMEDIAL DESIGN OF OPERABLE UNIT 3  
AT THE NEASE CHEMICAL SITE  
SALEM, COLUMBIANA COUNTY, OHIO**

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## **I. PURPOSE**

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Design (RD) for Operable Unit 3 (OU 3) as set forth in the Record of Decision (ROD) for the Nease Chemical Site (Site). The ROD for OU 3 was signed by the Director of the Superfund Division of the United States Environmental Protection Agency (EPA) on September 24, 2008. This SOW addresses only the RD for OU 3. The Respondent, in conjunction with EPA and the Ohio EPA as set forth herein, will develop the RD consistent with the ROD, the Administrative Order on Consent (AOC) to which the SOW is attached, and EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive 9355.0-4A) for designing remedial action. The AOC and SOW do not require implementation of the remedy.

## **II. DESCRIPTION OF THE REMEDIAL ACTION**

The Respondent will undertake the RD as set forth herein. The RD will address the timing and sequencing of the remedial actions. The objectives of the response actions for OU 3 at the Nease Site are to protect public health, welfare and the environment and to comply with applicable federal and state laws.

The selected remedy for OU 3 specifies response actions that will address mirex contaminated sediments in Feeder Creek, and floodplain soils and sediments in and along the Middle Fork of Little Beaver Creek (MFLBC) at the Site. The OU 3 ROD contains a detailed description of the selected remedy. The major components of the selected response actions for OU 3 include:

- **Feeder Creek Sediment** – All mirex contaminated sediments in Feeder Creek shall be removed and residuals (if any) covered to mitigate potential future releases of mirex into the MFLBC. Excavated sediments shall be consolidated with OU 2 contaminated soils within the Nease facility, and capped and covered as called for in the OU 2 ROD. It is anticipated that sediment will be removed to a 2-foot depth along the entire creek, unless uncontaminated or coarse material or bedrock is encountered first.
- **MFLBC Sediment** – MFLBC sediment shall be removed by dredging or dry excavation from a 6 ½ mile stretch downstream of the Nease facility. Targeted sediment removal shall be conducted in more highly contaminated areas to achieve the remediation goal while minimizing short-term impacts to aquatic and riparian habitats. The MFLBC sediment remediation goal is 0.5 mg/kg of mirex, calculated as a surface weighted average concentration (SWAC). However, because portions of the MFLBC are high quality habitat, in certain cases, based on the OU 3 Pre-Design Investigation (PDI) and considering existing habitat quality, the mirex SWAC remediation goal may be modified in the approved RD to be as high as 0.75 mg/kg for those stretches. The SWAC shall be calculated over one river mile (RM), or as specified in the approved RD. The selected remedy also includes the option of using post-removal backfilling in some areas to achieve the sediment remediation goal, if residual mirex levels are too high and additional removal is not practicable. Dredged sediment shall be transported to the former Nease facility for consolidation with OU 2 contaminated soils within the Nease facility, and capped and covered as called for in the OU 2 ROD.

- MFLBC Floodplain Soil – Contaminated soil shall be excavated with conventional equipment from floodplain areas in a 6 ½ mile stretch downstream of the Nease facility to meet the floodplain soil remediation goal of 1 mg/kg of mirex, calculated as a SWAC. The SWAC shall be calculated over an area of one acre, or as specified in the approved RD. Excavated floodplain areas shall be backfilled and graded. Targeted removal of floodplain soils shall occur to meet the remediation goal while minimizing short-term impacts to riparian habitats. Excavated soil shall be transported to the former Nease facility for consolidation with OU 2 contaminated soils within the Nease facility, and capped and covered as called for in the OU 2 ROD.
- The remediation goals for MFLBC sediment and floodplain soil, and the complete removal of contaminated sediment from Feeder Creek will allow for unrestricted use and unlimited access for those media once the goals are met. Therefore, no institutional controls or long-term operation and maintenance will be required for Feeder Creek, or MFLBC sediments or floodplain soils. However, soils and sediments will be consolidated with contaminated soils from OU 2 and contained on-Site. Institutional controls and long-term operation and maintenance of the consolidated materials will be as required for soils in the OU 2 ROD.
- A PDI is necessary before the remedial design can be finalized. The PDI shall include further delineation of the distribution of mirex in sediments and floodplain soil between RM 37.6 through 31, as well as establish pre-construction baseline conditions.
- Construction and performance monitoring are required for demonstrating compliance of the remedy with the remedial goals and to measure overall system recovery.
  - Construction monitoring will be used to assess acute risks to the community, ecology, and workers that may occur as a result of implementing the remedy.
  - Performance monitoring will be used post-remediation to demonstrate that the soil and sediment remediation goals were met by the implemented remedy.
  - Mirex levels in surface water in Feeder Creek and MFLBC and mirex levels in fish will be measured in accordance with the ROD and approved RD after the post-construction recovery period.
  - Operation, monitoring and maintenance of the consolidated materials will be as required for soils in the OU 2 ROD.

### **III. REMEDIAL DESIGN**

#### **A. Introduction**

The RD for OU 3 will consist of four phases: (1) pre-design planning; (2) pre-design investigation; (3) remedial design planning; and (4) preparation of remedial design documents.

The work to be performed in each of these phases is described below. The four RD phases are discussed below in subsections B through E.

This SOW is intended to achieve an expedited, cost-effective RD for OU 3 that builds on prior work using iterative approaches, is protective of human health and the environment, is consistent with the National Contingency Plan, and complies with the ROD for OU 3. All phases of the RD are intended to be a collaborative and cooperative process between the Respondent, EPA and Ohio EPA. The parties will meet and confer on a regular basis and seek to anticipate and resolve key issues in advance of document development and completion. The RD will be conducted so pertinent information will be taken into account as it becomes available. The Respondent shall submit in hard copy and electronic format, all deliverables required by this SOW. In addition, upon request from EPA, the Respondent shall submit the remedial design drawings in standard CAD format (i.e., DXF or DWG).

Because additional characterization of floodplain soils and MFLBC sediment is necessary to support the targeted approach to removal selected for OU 3, the ROD specifies that pre-design work will be required, and the results may be used to establish performance expectations to meet the remediation goals.

## **B. Phase I - Pre-Design Planning**

The Respondent shall submit a draft Pre-Design Investigation Work Plan (OU 3 PDI Work Plan) in accordance with the schedule in Section IV of this SOW. Prior to submittal of the OU 3 PDI Work Plan, the Respondent shall conduct Site reconnaissance that includes a site visit and discussions with potentially affected property owners to identify areas that may need to be assessed as part of the OU 3 PDI. This visit shall be coordinated with EPA, with an opportunity for Ohio EPA to participate.

The OU 3 PDI Work Plan shall discuss the objectives of each component of the PDI; the minimum information needed to meet the objectives; how each component of the PDI will be addressed; identify the phases, tasks and sequencing necessary to complete the PDI; and provide an overall management strategy for completion of such tasks. The OU 3 PDI Work Plan shall also include a project schedule for major activities and deliverables. The plan shall document the responsibility and authority of the entities and key personnel involved in the OU 3 PDI.

The parties intend the OU 3 PDI work to be conducted in a flexible manner, to most efficiently meet the objectives of the study. In particular, characterization of the current distribution of mirex in the MFLBC may be accomplished best by using an iterative approach to sampling and data review. To the extent appropriate, the planning document shall incorporate elements of dynamic field activities. This approach, sometimes called the Triad approach, involves systematic planning, a dynamic work plan strategy, and, where possible, real-time measurement technologies. Dynamic field activities, if used, shall be conducted consistent with OSWER No. 9200.1-40, *Using Dynamic Field Activities for On-Site Decision Making: A Guide for Project Managers*.

The OU 3 PDI shall, at a minimum, include:

1. MFLBC Current Conditions

a. Evaluation of the current sediment mirex distribution.

- Refinement of the extent and distribution of mirex contamination in MFLBC sediment between RM 37.6 through 31 to delineate targeted areas that require removal to meet the remediation goal.
- Identification of smaller sub-areas of elevated concentrations to evaluate whether a maximum, “do not exceed” mirex criterion shall be established in the RD.
- Detailed mapping of sediment bodies between RM 37.6 through 31.
- Identification of areas of high quality habitat.

b. Evaluation of the current floodplain mirex distribution.

- Refinement of the extent and distribution of mirex contamination in floodplain surface soils along the MFLBC between RM 37.6 through 31 to delineate targeted areas that require removal to meet the remediation goal.
- Identification of smaller sub-areas of elevated concentrations to evaluate whether a maximum, “do not exceed” mirex criterion shall be established in the RD.
- Physical characterization of the areas targeted for remediation.
- Identification of areas of high quality habitat.

c. Sampling and analysis of both whole body and fillet fish samples for mirex and lipids to provide a baseline sampling event consistent with the anticipated O&M monitoring program.

d. Wetland and floodplain assessments to evaluate potential construction impacts.

2. Supporting Plans

a. Field Sampling Plan (FSP); and

b. Health and Safety Plan (HSP).

Subject to approval by EPA, the supporting plans may build on existing, approved site-specific plans. The supporting plans may be submitted as separate documents or may be incorporated into the OU 3 PDI Work Plan. The data shall be taken in accordance with a Quality Assurance Project Plan (QAPP). The Respondent shall evaluate the existing QAPP to establish whether modifications are needed (e.g., an additional approved lab for fish sampling).

### **C. Phase II - Pre-Design Investigation**

The Respondent shall conduct the OU 3 PDI work in accordance with the final OU 3 PDI Work Plan, this SOW and AOC. At any time during the work, if information becomes available that may indicate modifications to the OU 3 PDI Work Plan may be needed to meet the study objectives, the parties shall confer as soon as possible to attempt to agree on the required changes. Any modifications will be made in accordance with Section VIII of the AOC.

In accordance with the schedule in Section IV of this SOW, the Respondent shall submit a technical memorandum summarizing the PDI findings, including tables and figures. Comments on the PDI technical memorandum shall be addressed in the preliminary design documents.

### **D. Phase III - Remedial Design Planning**

In accordance with the schedule in Section IV of this SOW, the Respondent shall submit a draft OU 3 Remedial Design Work Plan (OU 3 RD Work Plan) which shall document the overall management strategy for performing the design, construction, operation, maintenance and monitoring of the OU 3 remedial action. The OU 3 RD Work Plan will discuss how each component of the RD will be addressed; identify the phases, tasks and sequencing necessary to complete the RD; and provide an overall management strategy for completion of such tasks. The OU 3 RD Work Plan will also include a project schedule for major design activities and submissions. The plan will document the responsibility and authority of the entities and key personnel involved in the RD.

### **E. Phase IV - Preparation of Remedial Design Documents**

The goal of Phase IV is to develop a technical package (or packages) with a complete remedial design (which may include performance specifications) that addresses all elements of the remedy selected in the ROD for OU 3. The Respondent shall prepare construction plans and specifications to implement the OU 3 remedy. Subject to approval by EPA, the Respondent may submit more than one set of design submittals reflecting different components of the OU 3 remedial action. All plans and specifications shall be developed in accordance with EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A) and shall demonstrate that the OU 3 remedial action shall meet all objectives of the OU 3 ROD, the AOC and this SOW, including all performance standards.

The Preliminary and Final Design Documents will be submitted as set forth in the schedule in Section IV of this SOW.

#### **1. Preliminary Design Documents**

The Respondent shall submit the Preliminary Design when the design effort is approximately 30 % complete. The Preliminary Design submittal shall include or discuss, at a minimum, the following:

- a. Preliminary plans, drawings and sketches, including design calculations;
- b. Results of studies and additional field sampling and analysis, if any, not discussed in previous submissions;
- c. Design assumptions and parameters, including design restrictions, process performance criteria, appropriate unit processes, expected removal efficiencies, and information about treatment and treatment efficiencies of process waste (e.g., water from sediment), as applicable;
- d. Draft Performance Standard Verification Plan;
- e. Outline Construction Quality Assurance Plan (CQAP), including proposed cleanup verification methods, including compliance with ARARs;
- f. Outline of required specifications;
- g. Proposed siting/locations of processes/construction activities;
- h. Real estate, easement, and substantive permit equivalency (or permit) requirements;
- i. Expected long-term monitoring and operation requirements; and
- j. Preliminary construction schedule, including contracting strategy.

## 2. Final Design Documents

The Respondent shall submit the draft Final Design<sup>1</sup> when the design effort is 100% complete. The draft Final Design shall fully address all comments made to the preceding design submittal. The Final Design shall fully address all comments made to the draft Final Design and shall include drawings and specifications (and, if requested by EPA, reproducible drawings and specifications suitable for bid advertisement). The draft Final Design shall serve as the Final Design if EPA has no further comments and issues the notice to proceed.

The Prefinal and Final Design submittals shall include those elements listed for the Preliminary Design, as well as, the following:

- a. Drawings and specifications (and, if requested by EPA, reproducible drawings and specifications suitable for bid advertisement);
- b. Final Performance Standard Verification Plan;
- c. Final CQAP;

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<sup>1</sup> It is expected that the Final Design can support a revised Capital and Operation and Maintenance Cost Estimate that may be requested by EPA separately.

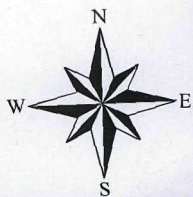
- d. Draft O&M Plan;
- e. Project Schedule for construction and implementation of the remedial action; and
- f. The following supporting plans (which may build upon the plans developed for the PDI, or other previously approved plans):
  - Health and Safety Plan (HSP) - The final Remedial Action HSP will be submitted prior to the start of construction, in accordance with the approved construction schedule; and
  - Contingency Plan - The final Contingency Plan will be submitted prior to the start of construction, in accordance with the approved construction schedule.

#### **IV. SUMMARY OF PRELIMINARY PROJECT SCHEDULE**

A summary of the preliminary project schedule is presented below.

<b>DELIVERABLE/MILESTONE</b>	<b>DUE DATE</b>
Draft PDI Work Plan	Due 60 days after the effective date of this AOC.
PDI FSP	Due with the draft PDI Work Plan
HSP	Due with the draft PDI Work Plan
Final PDI Work Plan	Due 60 days or such longer period as EPA may approve after receipt of EPA's direction to modify pursuant to Section X of the AOC.
PDI technical memorandum	In accordance with the schedule in the final PDI Work Plan.
Draft Remedial Design Work Plan	Due 60 days or such longer period as EPA may approve after receipt of EPA's comments on the PDI technical memorandum
Final Remedial Design Work Plan	Due 60 days or such longer period as EPA may approve after receipt of EPA's direction to modify pursuant to Section X of the AOC.
Preliminary Design Documents	In accordance with the schedule in the final RD Work Plan.
Final Design Documents	In accordance with the schedule in the final RD Work Plan.
Progress Reports	As provided in the AOC





# APPENDIX B OPERABLE UNIT 3 OF NEASE SITE

